

WHAT IS CLAIMED IS:

1. A nail varnish composition comprising, in a cosmetically acceptable medium comprising at least one organic solvent, at least one block polymer, the composition being capable of forming a film with a dampening power ($\text{tg}\delta$) of greater than or equal to 0.4 at a temperature of 30°C and a frequency of 20 Hz.
2. The composition according to claim 1, wherein the dampening power of the film is greater than or equal to 0.5.
3. The composition according to claim 1, wherein the film of the composition has a storage modulus E' of greater than or equal to 1 MPa, at a temperature of 30°C and a frequency of 0.1 Hz.
4. The composition according to claim 3, wherein the storage modulus E' of the film is greater than or equal to 5 MPa.
5. The composition according to claim 4, wherein the storage modulus E' of the film is greater than or equal to 10 Mpa.
6. The composition according to claim 1, wherein the film of the composition has a breaking strain δ_r of greater than or equal to 5%, and/or a breaking energy per unit volume W_r of greater than or equal to 0.2 J/cm³ at a temperature of 20°C.
7. The composition according to claim 6, wherein the film has a breaking strain δ_r ranging from 5% to 500% and/or a breaking energy per unit volume W_r of greater than or equal to 0.2 J/cm³ at a temperature of 20°C.
8. The composition according to claim 7, wherein the film has a breaking strain δ_r greater than or equal to 15% and/or a breaking energy per unit volume W_r of greater than or equal to 0.2 J/cm³ at a temperature of 20°C.

9. The composition according to claim 8, wherein the film has a breaking strain δr ranging from 15% to 400% and/or a breaking energy per unit volume W_r of greater than or equal to 0.2 J/cm^3 at a temperature of 20°C .

10. The composition according to claim 1, wherein the at least one block polymer comprises at least a first block and at least a second block that have different glass transition temperatures (T_g), wherein the at least one first and second blocks are linked together via at least one intermediate segment comprising at least one constituent monomer of the at least one first block and at least one constituent monomer of the at least one second block.

11. The composition according to claim 10, wherein said at least one first block and said at least one second block are incompatible with each other.

12. The composition according to claim 10, wherein the at least one first block is chosen from:

- a) a block with a T_g of greater than or equal to 40°C ,
- b) a block with a T_g of less than or equal to 20°C ,
- c) a block with a T_g of between 20 and 40°C , and

wherein the at least one second block is chosen from a block of category a), b) or c) that is different from the at least one first block.

13. The composition according to claim 12, wherein the block with a T_g of greater than or equal to 40°C is totally or partially derived from at least one monomer wherein a homopolymer prepared from the at least one monomer has a T_g of greater than or equal to 40°C .

14. The composition according to claim 13, wherein the at least one monomer is chosen from:

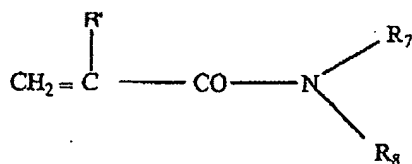
- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_1$

wherein R_1 is chosen from linear and branched unsubstituted alkyl groups comprising from 1 to 4 carbon atoms, and from a C_4 to C_{12} cycloalkyl group,

- acrylates of formula $\text{CH}_2 = \text{CH-COOR}_2$

wherein R_2 is chosen from a C_4 to C_{12} cycloalkyl group, and

- (meth)acrylamides of formula:



wherein R_7 and R_8 , which may be identical or different, each are chosen from a hydrogen atom, and linear or branched alkyl groups comprising 1 to 12 carbon atoms; or R_7 is H and R_8 is a 1,1-dimethyl-3-oxobutyl group, and R' is chosen from H and methyl.

15. The composition according to claim 14, wherein the unsubstituted alkyl group of R_1 is chosen from a methyl, an ethyl, a propyl, and an isobutyl group.

16. The composition according to claim 14, wherein the C_4 to C_{12} cycloalkyl group of R_2 is chosen from an isobornyl group and a tert-butyl group.

17. The composition according to claim 14, wherein the alkyl group with 1 to 12 carbon atoms of R_7 and R_8 is chosen from an n-butyl, a t-butyl, an isopropyl, an isohexyl, an isooctyl, and an isononyl group.

18. The composition according to claim 13, wherein the at least one monomer is chosen from methyl methacrylate, isobutyl methacrylate, and isobornyl (meth)acrylate.

19. The composition according to claim 12, wherein the block with a T_g of less than or equal to 20°C is totally or partially derived from at least one monomer wherein a homopolymer prepared from the at least one monomer has a T_g of less than or equal to 20°C.

20. The composition according to claim 19, wherein the at least one monomer is chosen from:

- acrylates of formula $\text{CH}_2 = \text{CHCOOR}_3$,

wherein R₃ is chosen from linear and branched C₁ to C₁₂ unsubstituted alkyl groups, with the exception of a tert-butyl group, wherein at least one heteroatom chosen from O, N and S is optionally intercalated;

- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_4$,

wherein R₄ is chosen from linear and branched C₆ to C₁₂ unsubstituted alkyl groups, wherein at least one heteroatom chosen from O, N and S is optionally intercalated;

- vinyl esters of formula $\text{R}_5\text{-CO-O-CH} = \text{CH}_2$

wherein R₅ is chosen from linear and branched C₄ to C₁₂ alkyl groups;

- C₄ to C₁₂ alcohol and vinyl alcohol ethers; and

- N-(C₄ to C₁₂)alkyl acrylamides.

21. The composition according to claim 20, wherein said N-(C₄ to C₁₂)alkyl acrylamide is N-octylacrylamide.

22. The composition according to claim 20, wherein the at least one monomer is chosen from alkyl acrylates whose alkyl chain contains from 1 to 10 carbon atoms, with the exception of the tert-butyl group.

23. The composition according to claim 12, wherein the block with a Tg of between 20 and 40°C is totally or partially derived from at least one monomer wherein a homopolymer prepared from the at least one monomer has a Tg of between 20 and 40°C.

24. The composition according to claim 23, wherein the block with a Tg of between 20 and 40°C is totally or partially derived from at least one monomer wherein the corresponding homopolymer has a Tg of greater than or equal to 40°C and from at least one monomer wherein the corresponding homopolymer has a Tg of less than or equal to 20°C.

25. The composition according to claim 23, wherein the block with a Tg of between 20 and 40°C is totally or partially derived from at least one monomer chosen from methyl methacrylate, isobornyl acrylate, isobornyl methacrylate, trifluoroethyl methacrylate, butyl acrylate, and 2-ethylhexyl acrylate.

26. The composition according to claim 1, wherein the at least one block polymer comprises at least one first block and at least one second block,

the at least one first block having a Tg of greater than or equal to 40°C, and

the at least one second block having a Tg of less than or equal to 20°C,

the at least one first and second blocks are linked together via at least one intermediate segment comprising:

at least one constituent monomer of the at least one first block and

at least one constituent monomer of the at least one second block.

27. The composition according to claim 26, wherein the at least one first block is totally or partially derived from at least one monomer wherein a homopolymer prepared from the at least one monomer has a Tg of greater than or equal to 40°C.

28. The composition according to claim 26, wherein the at least one first block is a copolymer derived from at least one monomer wherein the homopolymer prepared from the at least one monomer has a Tg of greater than or equal to 40°C.

29. The composition according to claim 27, wherein the at least one monomer is chosen from:

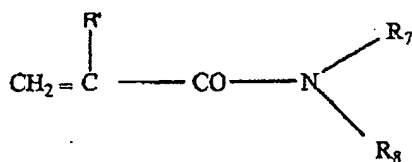
- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_1$

wherein R_1 is chosen from linear and branched unsubstituted alkyl groups containing from 1 to 4 carbon atoms, and from a C_4 to C_{12} cycloalkyl group,

- acrylates of formula $\text{CH}_2 = \text{CH-COOR}_2$

wherein R_2 is a C_4 to C_{12} cycloalkyl group, and

- (meth)acrylamides of formula:



wherein R_7 and R_8 , which may be identical or different, each are chosen from a hydrogen atom, linear and branched alkyl groups comprising 1 to 12 carbon atoms; or R_7 is H and R_8 is a 1,1-dimethyl-3-oxobutyl group, and R' is chosen from H and methyl.

30. The composition according to claim 29, wherein the unsubstituted alkyl group of R_1 is chosen from a methyl, an ethyl, a propyl, and an isobutyl group.

31. The composition according to claim 29, wherein the C₄ to C₁₂ cycloalkyl group of R₂ is chosen from an isobornyl group and a tert-butyl group.

32. The composition according to claim 29, wherein the alkyl group with 1 to 12 carbon atoms of R₇ and R₈ is chosen from an n-butyl, a t-butyl, an isopropyl, an isohexyl, an isooctyl, and an isononyl group.

33. The composition according to claim 27, wherein the at least one monomer is chosen from methyl methacrylate, isobutyl methacrylate, and isobornyl (meth)acrylate.

34. The composition according to claim 26, wherein the at least one first block is present in the at least one block polymer in an amount ranging from 20% to 90% by weight of the at least one block polymer.

35. The composition according to claim 34, wherein at least one first block is present in the at least one block polymer in an amount ranging from 30% to 80% by weight of the at least one block polymer.

36. The composition according to claim 35, wherein the at least one first block is present in the at least one block polymer in an amount ranging from 50% to 70% by weight of the polymer

37. The composition according to claim 26, wherein the at least one second block is totally or partially derived from at least one monomer wherein a homopolymer prepared from the at least one monomer has a T_g of less than or equal to 20°C.

38. The composition according to claim 26, wherein the at least one second block is a homopolymer derived from at least one monomer wherein a homopolymer prepared from the at least one monomer has a T_g of less than or equal to 20°C.

39. The composition according to claim 37, wherein the at least one monomer is chosen from:

- acrylates of formula $\text{CH}_2 = \text{CHCOOR}_3$,

wherein R_3 is chosen from linear and branched C_1 to C_{12} unsubstituted alkyl groups, with the exception of the tert-butyl group, wherein at least one heteroatom chosen from O, N and S is optionally intercalated;

- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_4$,

wherein R_4 is chosen from linear and branched C_6 to C_{12} unsubstituted alkyl groups, wherein at least one heteroatom chosen from O, N and S is optionally intercalated;

- vinyl esters of formula $\text{R}_5\text{-CO-O-CH} = \text{CH}_2$

wherein R_5 is chosen from linear and branched C_4 to C_{12} alkyl groups;

- C_4 to C_{12} alcohol and vinyl alcohol ethers; and

- $\text{N-(C}_4 \text{ to C}_{12})$ alkyl acrylamides.

40. The composition according to claim 39, wherein the $\text{N-(C}_4 \text{ to C}_{12})$ alkyl acrylamide is N-octylacrylamide.

41. The composition according to claim 37, wherein the at least one monomer is chosen from alkyl acrylates whose alkyl chain contains from 1 to 10 carbon atoms, with the exception of the tert-butyl group.

42. The composition according to claim 26, wherein the at least one second block is present in the at least one block polymer in an amount ranging from 5% to 75% by weight of the at least one block polymer.

43. The composition according to claim 42, wherein the at least one second block is present in the at least one block polymer in an amount ranging from 15% to 50% by weight of the at least one block polymer.

44. The composition according to claim 43, wherein the at least one second block is present in the at least one block polymer in an amount ranging from 25% to 45% by weight of the at least one block polymer.

45. The composition according to claim 1, wherein the at least one block polymer comprises at least one first block and at least one second block, the at least one first block having a T_g of between 20 and 40°C and the at least one second block having a T_g of less than or equal to 20°C or a T_g of greater than or equal to 40°C,

wherein the at least one first and second blocks are linked together via at least one intermediate segment comprising at least one constituent monomer of the at least one first block and at least one constituent monomer of the at least one second block.

46. The composition according to claim 45, wherein the at least one first block is totally or partially derived from at least one monomer wherein a homopolymer prepared from the at least one monomer has a T_g of between 20 and 40°C.

47. The composition according to claim 45, wherein the at least one first block is a copolymer derived from at least one monomer wherein a corresponding homopolymer has a T_g of greater than or equal to 40°C, and from at least one monomer wherein a corresponding homopolymer has a T_g of less than or equal to 20°C.

48. The composition according to claim 45, wherein the at least one first block is derived from at least one monomer chosen from methyl methacrylate, isobornyl acrylate, isobornyl methacrylate, butyl acrylate, and 2-ethylhexyl acrylate.

49. The composition according to claim 45, wherein the at least one first block of the at least one block polymer is present in an amount ranging from 10% to 85% by weight of the at least one block polymer.

50. The composition according to claim 49, wherein the at least one first block is present in the at least one block polymer in an amount ranging from 30% to 80% by weight of the at least one block polymer.

51. The composition according to claim 50, wherein the at least one first block is present in the at least one block polymer in an amount ranging from 50% to 70% by weight of the at least one block polymer.

52. The composition according to claim 45, wherein the at least one second block has a T_g of greater than or equal to 40°C and is totally or partially derived from at least one monomer wherein a homopolymer prepared from the at least one monomer has a T_g of greater than or equal to 40°C.

53. The composition according to claim 45, wherein the at least one second block has a T_g of greater than or equal to 40°C and is a homopolymer derived from at least one monomer wherein a homopolymer prepared from the at least one monomer has a T_g of greater than or equal to 40°C.

54. The composition according to claim 47, wherein the at least one monomer is chosen from:

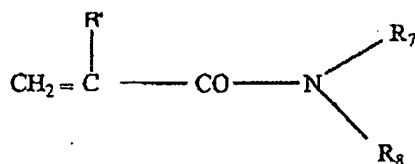
- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_1$

wherein R₁ is chosen from linear and branched unsubstituted alkyl groups containing from 1 to 4 carbon atoms, and from a C₄ to C₁₂ cycloalkyl group,

- acrylates of formula $\text{CH}_2 = \text{CH-COOR}_2$

wherein R₂ is chosen from a C₄ to C₁₂ cycloalkyl group, and

- (meth)acrylamides of formula:



wherein R₇ and R₈, which may be identical or different, each are chosen from a hydrogen atom, linear and branched alkyl groups comprising 1 to 12 carbon atoms; or R₇ is H and R₈ is a 1,1-dimethyl-3-oxobutyl group, and R' is chosen from H and methyl.

55. The composition according to claim 54, wherein the unsubstituted alkyl group of R₁ is chosen from a methyl, an ethyl, a propyl, and an isobutyl group.

56. The composition according to claim 54, wherein the C₄ to C₁₂ cycloalkyl group of R₂ is chosen from an isobornyl group and a tert-butyl group.

57. The composition according to claim 54, wherein the alkyl group with 1 to 12 carbon atoms of R₇ and R₈ is chosen from an n-butyl, t-butyl, isopropyl, isohexyl, isooctyl, and isononyl group.

58. The composition according to claim 47, wherein the at least one monomer is chosen from methyl methacrylate, isobutyl methacrylate, and isobornyl (meth)acrylate.

59. The composition according to claim 45, wherein the at least one second block is present in the at least one block polymer in an amount ranging from 10% to 85% by weight of the at least one block polymer.

60. The composition according to claim 59, wherein the at least one second block is present in the at least one block polymer in an amount ranging from 20% to 70% by weight of the at least one block polymer.

61. The composition according to claim 60, wherein the at least one second block is present in the at least one block polymer in an amount ranging from 30% to 70% by weight of the at least one block polymer.

62. The composition according to claim 45, wherein the at least one second block has a Tg of less than or equal to 20°C and is totally or partially derived from at least one monomer wherein a homopolymer prepared from the at least one monomer has a Tg of less than or equal to 20°C.

63. The composition according to claim 45, wherein the at least one second block has a Tg of less than or equal to 20°C and is a homopolymer derived from at least one monomer wherein a homopolymer prepared from the at least one monomer has a Tg of less than or equal to 20°C.

64. The composition according to claim 62, wherein the at least one monomer is chosen from:

- acrylates of formula $\text{CH}_2 = \text{CHCOOR}_3$,

wherein R_3 is chosen from linear and branched C_1 to C_{12} unsubstituted alkyl groups, with the exception of the tert-butyl group, wherein at least one heteroatom chosen from O, N and S is optionally intercalated;

- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_4$,

wherein R_4 is chosen from linear and branched C_6 to C_{12} unsubstituted alkyl groups, wherein at least one heteroatom chosen from O, N and S is optionally intercalated;

- vinyl esters of formula $R_5\text{-CO-O-CH}=\text{CH}_2$

wherein R_5 is chosen from linear and branched C_4 to C_{12} alkyl groups;

- C_4 to C_{12} alcohol and vinyl alcohol ethers; and

- N-(C_4 to C_{12})alkyl acrylamides.

65. The composition according to claim 64, wherein the N-(C_4 to C_{12})alkyl acrylamide is N-octylacrylamide.

66. The composition according to claim 62, wherein the at least one monomer is chosen from alkyl acrylates whose alkyl chain contains from 1 to 10 carbon atoms, with the exception of the tert-butyl group.

67. The composition according to claim 62, wherein the at least one second block is present in the at least one block polymer in an amount ranging from 20% to 90% by weight of the at least one block polymer.

68. The composition according to claim 67, wherein the at least one second block is present in the at least one block polymer in an amount ranging from 30% to 80% by weight of the at least one block polymer.

69. The composition according to claim 68, wherein the at least one second block is present in the at least one block polymer in an amount ranging from 50% to 70% by weight of the at least one block polymer.

70. The composition according to claim 10, wherein the at least one first block and/or the at least one second block comprises at least one additional monomer.

71. The composition according to claim 70, wherein the at least one additional monomer is chosen from hydrophilic monomers and ethylenically unsaturated monomers comprising at least one silicon atom.

72. The composition according to claim 70, wherein the at least one additional monomer is chosen from:

- ethylenically unsaturated monomers comprising at least one carboxylic or sulphonic acid function,

- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_6$

wherein R_6 is chosen from linear and branched alkyl groups containing from 1 to 4 carbon atoms, the alkyl group being substituted with at least one substituent chosen from hydroxyl groups and halogen atoms,

- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_9$,

wherein R_9 is chosen from linear and branched C_6 to C_{12} alkyl groups wherein at least one heteroatom chosen from O, N and S is optionally intercalated, the alkyl group being substituted with at least one substituent chosen from hydroxyl groups and halogen atoms;

- acrylates of formula $\text{CH}_2 = \text{CHCOOR}_{10}$,

wherein R_{10} is chosen from

- linear and branched C_1 to C_{12} alkyl groups substituted with at least one substituent chosen from hydroxyl groups and halogen atoms,

- $(\text{C}_1\text{-C}_{12})\text{alkyl-O-POE}$ (polyoxyethylene) with repetition of the oxyethylene unit from 5 to 30 times, and

- a polyoxyethylenated group comprising from 5 to 30 ethylene oxide units, and

- ethylenically unsaturated monomers comprising at least one tertiary amine function.

73. The composition according to claim 72, wherein the alkyl group of R_6 containing from 1 to 4 carbon atoms is chosen from a methyl, ethyl, propyl, and isobutyl group.

74. The composition according to claim 72, wherein at least one of R_6 and R_{10} is chosen from 2-hydroxypropyl methacrylate, 2-hydroxyethyl methacrylate, and trifluoroethyl methacrylate.

75. The composition according to claim 72, wherein the alkyl group of at least one of R_6 , R_9 , and R_{10} is substituted with halogen atoms chosen from chlorine, bromine, iodine, and fluorine.

76. The composition according to claim 72, wherein the (C_1-C_{12}) alkyl-O-POE of R_{10} is methoxy-POE.

77. The composition according to claim 70, wherein the at least one additional monomer is chosen from acrylic acid, methacrylic acid, and trifluoroethyl methacrylate.

78. The composition according to claim 70, wherein the at least one additional monomer is present in an amount ranging from 1% to 30% by weight relative to the total weight of the at least one first and/or second blocks of the at least one block polymer.

79. The composition according to claim 1, wherein each of the at least one first and second blocks comprises at least one monomer chosen from acrylic acid, acrylic acid esters, methacrylic acid, and methacrylic acid esters.

80. The composition according to claim 1, wherein each of the at least one first and second blocks is totally derived from at least one monomer chosen from acrylic acid, acrylic acid esters, methacrylic acid, and methacrylic acid esters.

81. The composition according to claim 10, wherein the difference between the Tg of the at least one first and second blocks is greater than 10°C.

82. The composition according to claim 81, wherein the difference between the Tg of the at least one first and second blocks is greater than 20°C.

83. The composition according to claim 82, wherein the difference between the Tg of the at least one first and second blocks is greater than 30°C.

84. The composition according to claim 83, wherein the difference between the Tg of the at least one first and second blocks is greater than 40°C.

85. The composition according to claim 10, wherein the at least one intermediate segment has a Tg between the Tgs of the at least one first and second blocks.

86. The composition according to claim 1, wherein the at least one block polymer has a polydispersity index I of greater than 2.0.

87. The composition according to claim 86, wherein the at least one block polymer has a polydispersity index of greater than or equal to 2.5.

88. The composition according to claim 87, wherein the at least one block polymer has a polydispersity index of greater than or equal to 2.8.

89. The composition according to claim 88, wherein the at least one block polymer has a polydispersity index ranging from 2.8 to 6.

90. The composition according to claim 1, wherein the at least one block polymer is a film-forming linear block ethylene polymer.

91. The composition according to claim 1, wherein the at least one block polymer has a weight-average mass (M_w) which is less than or equal to 300,000.

92. The composition according to claim 91, wherein the at least one block polymer has a weight-average mass (M_w) which ranges from 35,000 to 200,000.

93. The composition according to claim 92, wherein the at least one block polymer has a weight-average mass (M_w) which ranges from 45,000 to 150,000.

94. The composition according to claim 1, wherein the at least one block polymer has a number-average mass (M_n) which is less than or equal to 70,000.

95. The composition according to claim 94, wherein the at least one block polymer has a number-average mass (M_n) which ranges from 10,000 to 60,000.

96. The composition according to claim 95, wherein the at least one block polymer has a number-average mass (M_n) which ranges from 12,000 to 50,000.

97. The composition according to claim 1, wherein the at least one block polymer is not soluble to an active material content of at least 1% by weight in water or in a mixture of water and of a linear or branched lower monoalcohol having from 2 to 5 carbon atoms, without pH modification, at room temperature (25°C).

98. The composition according to claim 1, wherein the at least one block polymer is not an elastomer.

99. The composition according to claim 1, wherein the at least one block polymer is present in an amount ranging from 0.1% to 60% by weight relative to the total weight of the composition.

100. The composition according to claim 99, wherein the at least one block polymer is present in an amount ranging from 0.5% to 50% by weight relative to the total weight of the composition.

101. The composition according to claim 100, wherein the at least one block polymer is present in an amount ranging from 1% to 40% by weight relative to the total weight of the composition.

102. The composition according to claim 1, wherein the at least one organic solvent medium comprises an organic solvent chosen from:

- ketones that are liquid at room temperature;
- alcohols that are liquid at room temperature;
- glycols that are liquid at room temperature;
- propylene glycol ethers that are liquid at room temperature;
- cyclic ethers;
- short-chain esters containing from 3 to 8 carbon atoms in total;
- ethers that are liquid at room temperature;
- alkanes that are liquid at room temperature;
- alkyl sulphoxides;
- aldehydes that are liquid at room temperature;
- heterocyclic compounds; and
- propylene carbonate or ethyl 3-ethoxypropionate.

103. The composition according to claim 102, wherein the ketones that are liquid at room temperature are chosen from methyl ethyl ketone, methyl isobutyl ketone, diisobutyl ketone, isophorone, cyclohexanone, and acetone.

104. The composition according to claim 102, wherein the alcohols that are liquid at room temperature are chosen from ethanol, isopropanol, diacetone alcohol, 2-butoxyethanol, and cyclohexanol.

105. The composition according to claim 102, wherein the glycols that are liquid at room temperature are chosen from ethylene glycol, propylene glycol, pentylene glycol, and glycerol.

106. The composition according to claim 102, wherein the propylene glycol ethers that are liquid at room temperature are chosen from propylene glycol monomethyl ether, propylene glycol monomethyl ether acetate, and dipropylene glycol mono-n-butyl ether.

107. The composition according to claim 102, wherein the cyclic ethers are chosen from γ -butyrolactones.

108. The composition according to claim 102, wherein the short-chain esters containing from 3 to 8 carbon atoms in total are chosen from ethyl acetate, methyl acetate, propyl acetate, isopropyl acetate, n-butyl acetate, isopentyl acetate, methoxypropyl acetate, and butyl lactate.

109. The composition according to claim 102, wherein the ethers that are liquid at room temperature are chosen from diethyl ether, dimethyl ether, and dichlorodiethyl ether.

110. The composition according to claim 102, wherein the alkanes that are liquid at room temperature are chosen from decane, heptane, dodecane, and cyclohexane.

111. The composition according to claim 102, wherein the alkyl sulphoxides are dimethyl sulphoxides.

112. The composition according to claim 102, wherein the aldehydes that are liquid at room temperature are chosen from benzaldehyde and acetaldehyde.

113. The composition according to claim 102, wherein the heterocyclic compounds are tetrahydrofurans.

114. The composition according to claim 1, wherein the at least one organic solvent medium has a polarity P ranging from 0.422 to 0.725.

115. The composition according to claim 1, wherein the at least one organic solvent medium is present in an amount ranging from 10% to 95% by weight relative to the total weight of the composition.

116. The composition according to claim 115, wherein the at least one organic solvent medium is present in an amount ranging from 15% to 80% by weight relative to the total weight of the composition.

117. The composition according to claim 116, wherein the at least one organic solvent medium is present in an amount ranging from 20% to 60% by weight relative to the total weight of the composition.

118. The composition according to claim 1, further comprising at least one additional film-forming polymer.

119. The composition according to claim 118, wherein the at least one additional film-forming polymer is present in an amount ranging from 0.1% to 60% by weight relative to the total weight of the composition.

120. The composition according to claim 119, wherein the at least one additional film-forming polymer is present in an amount ranging from 2% to 40% by weight relative to the total weight of the composition.

121. The composition according to claim 120, wherein the at least one additional film-forming polymer is present in an amount ranging from 5% to 25% by weight relative to the total weight of the composition.

122. The composition according to claim 1, further comprising at least one plasticizer present in an amount of less than 20% by weight relative to the total weight of the composition.

123. The composition according to claim 122, wherein the at least one plasticizer is present in an amount of less than 15% by weight relative to the total weight of the composition.

124. The composition according to claim 123, wherein the at least one plasticizer is present in an amount of less than 10% by weight relative to the total weight of the composition.

125. The composition according to claim 124, wherein the at least one plasticizer is present in an amount of less than 5% by weight relative to the total weight of the composition.

126. The composition according to claim 1, further comprising at least one dyestuff.

127. The composition according to claim 126, wherein the at least one dyestuff is present in an amount ranging from 0.01% to 50% by weight relative to the total weight of the composition.

128. The composition according to claim 127, wherein the at least one dyestuff is present in an amount ranging from 0.01% to 30% by weight relative to the total weight of the composition.

129. A non-therapeutic cosmetic makeup or care process for nails, the process comprising

applying to the nails one coat of a nail varnish composition comprising, in a cosmetically acceptable medium, at least one block polymer, the composition being capable of forming a film with a dampening power ($\text{tg}\delta$) of greater than or equal to 0.4 at a temperature of 30°C and a frequency of 20 Hz.

130. A method for producing a glossy film comprising

applying to nails a nail varnish composition comprising, in a cosmetically acceptable medium, at least one block polymer, the composition being capable of forming a film with a dampening power ($\text{tg}\delta$) of greater than or equal to 0.4 at a temperature of 30°C and a frequency of 20 Hz,

wherein a film is produced on the nails and the film has at least one of good staying power and good wear resistance.

131. A nail varnish product comprising : i) a container delimiting at least one compartment closed by a cap, and ii) a composition received inside said compartment, said composition comprising, in a cosmetically acceptable medium comprising at least one organic solvent, at least one block polymer, the composition being capable of forming a film with a dampening power ($\text{tg}\delta$) of greater than or equal to 0.4 at a temperature of 30°C and a frequency of 20 Hz.

132. A nail varnish product according to claim 131 wherein the container is, at least in part, formed of glass.

133. A nail varnish product according to claim 131 wherein the container is, at least in part, formed of a material other than a glass.

134. A nail varnish product according to claim 133, wherein said material other than glass is chosen from thermoplastic materials and from metals.

135. A nail varnish product according to claim 134, wherein said thermoplastic materials are chosen from polypropylene and polyethylene.

136. A nail varnish product according to claim 131, wherein in a closed position of the container, the cap is linked to the container by a threading arrangement.

137. A nail varnish product according to claim 131, wherein in a closed position of the container, the cap is linked to the container by an arrangement other than a threading arrangement, such as snap-fitting.

138. A nail varnish product according to claim 131, wherein it comprises an applicator element in the form of a brush having at least one tuft of bristles.

139. A nail varnish product according to claim 131, wherein it comprises an applicator element in a form other than a brush having at least one tuft of bristles.

140. A nail varnish composition according to claim 139, wherein said applicator element is in the form of a spatula or a foam pad.